

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: DORE, David James

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EXAMINER: Cernoch, S. M.

TITLE: MIST-SPRAYING APPARATUS

Amendment B: CLAIM AMENDMENTS

Claims 1 - 14 (canceled).

15. (Currently Amended) A mist-spraying apparatus comprising:

an air-blowing means having an outlet conduit and an inlet conduit, said air-blowing means for blowing air through said outlet conduit into the enclosed space, said air-blowing means for drawing air from the enclosed space through said inlet conduit so as to circulate the air within the enclosed space;

an atomizing nozzle positioned within said outlet conduit;

a reservoir having a liquid therein;

a spraying ~~spray~~ means for delivering the liquid from said reservoir to said atomizing nozzle such that atomizing particles emitted by said atomizing nozzle are entrained in the air blown by said air-blowing means so as to be evenly distributed in the enclosed space, said spraying means comprising a pump; and

a controlling means for controlling said air-blowing means and said spraying means, said controlling means cooperative with said air-blowing means and said atomizing nozzle for commencing operation of said air-blowing means prior to operation of said atomizing nozzle and for continuing operation of said air-blowing means after operation of said atomizing nozzle has

ceased so as to continue circulation of the air and any atomized particles therein in the enclosed space for a predetermined period of time.

16. (Previously presented) The mist-spraying apparatus of Claim 15, said atomizing nozzle positioned centrally within said outlet conduit.

17. (Previously presented) The mist-spraying apparatus of Claim 15, said outlet conduit having a rectangular cross-sectional profile.

18. (Previously presented) The mist-spraying apparatus of Claim 15, said outlet conduit defining a slot through which the air is blown by said air-blowing means.

19. (Previously presented) The mist-spraying apparatus of Claim 15, said atomizing nozzle being inset within said outlet conduit.

20. (Previously presented) The mist-spraying apparatus of Claim 15, said atomizing nozzle having a spraying tip inset by at least 25 millimeters and by no more than 40 millimeters into said outlet conduit.

21. (Previously presented) The mist-spraying apparatus of Claim 15, further comprising:  
a source of steam in fluid communication with said air-blowing means such that steam from said source of steam is blown into the enclosed space through said outlet conduit.

22. (Previously presented) The mist-spraying apparatus of Claim 15, said atomizing nozzle comprising a 60° cone nozzle.

23. (Previously presented) The mist-spraying apparatus of Claim 15, said spraying means for spraying at least 11 liters of liquid at a pressure of 7 bar.

24. (Previously presented) The mist-spraying apparatus of Claim 15, said air-blowing means comprising a cylindrical fan.

25. (Previously presented) The mist-spraying apparatus of Claim 15, said liquid in said reservoir being a mixture of an oil and an aqueous solution.

26. (Previously presented) The mist-spraying apparatus of Claim 25, said oil selected from the group consisting of monopropylene glycol and monoethylene glycol.

27. (Previously presented) The mist-spraying apparatus of Claim 25, said mixture comprising less than one part oil to 100 parts of aqueous solution by volume.